# POLYMORPHISM ANALYSIS BETWEEN TWO LOCAL MALAYSIAN RICE VARIETIES

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## ABSTRACT

### POLYMORPHISM ANALYSIS BETWEEN TWO LOCAL MALAYSIAN RICE VARIETIES

Rice *(Oryza sativa L.)* is an important food crop and was consumed approximately 40% of people all over the world. In Malaysia approximately 1.95 million tonne of rice was produced and it is believed to increase within the growing population. Simple Sequence Repeats (SSRs) is one of the molecular markers that had been widely used to assist breeding approach in analyzing genetic relatedness, identification and selection of desired traits. A study was conducted to identify the polymorphism analysis between two local Malaysian rice varieties which are MR 264 and Pongsu Seribu. The extractions DNA were prepared through maceration of leaves using the modified CTAB (Cetyltrimethylammonium bromide) method. In this study, the percent of seeds survived were 88.2%. Polymorphism analysis was assayed by fifty SSR marker and fourteen marker were showed amplified bands are namely RM 495, RM1167, RM 148, RM 168, RM 146, RM 144, RM 101, RM 206, RM 1233, RM 8225, RM 125, RM 248, RM 304 and RM 333. Out of fourteen, only RM 495 and RM 1167 were demonstrated the polymorphic bands electrophoresed in 4% agarose gel which were mapped on chromosome number one.